

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1.-17. (canceled).

18. (currently amended): A zeolite tubular separation membrane comprising a porous tubular support with both ends open and a zeolite membrane which is formed with plural number of A-type zeolite single crystals on a surface of the porous tubular support, wherein A-type zeolite single crystals exposed on the surface of the zeolite membrane each have a growth axis almost perpendicular to the surface of the porous tubular support, and wherein the membrane has grain boundary layers of 5-50 nm in thickness in spaces among the A-type zeolite single crystals exposed on the surface of the zeolite membrane.

19.-26. (canceled).